



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,791	12/20/2001	James W. Clark	KCX-391(16284)	9606
22827	7590	05/18/2006		
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449				
			EXAMINER BOYD, JENNIFER A	
			ART UNIT 1771	PAPER NUMBER

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

<b>Office Action Summary</b>	<b>Application No.</b> 10/027,791	<b>Applicant(s)</b> CLARK ET AL.	
	<b>Examiner</b> Jennifer A. Boyd	<b>Art Unit</b> 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27 - 38, 50 - 51, 53 - 54, 56 - 58, 60 - 71 and 73 - 81 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27 - 38, 50 - 51, 53 - 54, 56 - 58, 60 - 71 and 73 - 81 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The Applicant's Amendments and Accompanying Remarks, filed February 27, 2006, have been entered and have been carefully considered. Claims 27 and 35 are amended, claims 39-49, 52, 55 and 59 are cancelled and claims 27 - 38, 50 - 51, 53 - 54, 56 - 58, 60 - 71 and 73 - 81 are pending. In view of Applicant's arguments that Lunsman teaches away from the claimed invention requiring an acidic composition rather than a basic composition and Harrison does not disclose the claimed pH, the Examiner withdraws all previously set forth rejections as detailed in Office Action dated November 28, 2006. After another search was conducted, additional prior art has been found which renders in the invention as currently claimed unpatentable for reasons herein below.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

3. Claims 27 - 38, 50 - 51, 53 - 54, 56 - 58, 60 - 71 and 73 - 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sherry et al. (US 6,716,805).

Sherry is directed to pre-moistened wipes (Title), specifically for use on floors, counters and walls (column 35, lines 55 - 69).

As to claims 27 and 35, Sherry teaches a pre-moistened wipe having a composition described in sections B and C (column 35, lines 58 - 60). According to formulation C, the

Art Unit: 1771

composition comprises an effective amount of a primary detergent or surfactant such as an alkyl polysaccharide (column 24, lines 55 – 69); the Examiner equates this to Applicant's "non-ionic surfactant. Sherry indicates that the wipe can comprise materials and made from methods described in sections D and D1 (column 35, lines 60 – 65). According to Section D, the wipe can be a nonwoven substrate (column 29, lines 10 – 20). The pre-moistened wipe has an optimum wetness from 1 – 5 grams of solution per gram of wipe (column 36, lines 5 – 15), which is equivalent to 100% - 500% of the dry weight of the wiper. Sherry teaches that the wipe may comprise low levels of effective anti-microbial ingredients such as BARDAC 2280 (column 37, lines 20 – 30), which according to Applicant's Specification is a benzalkonium halide. Sherry teaches that the anti-microbial may be present in the amount of 0.001 – 0.1% (column 37, lines 25 – 35). Sherry teaches that the anti-microbial additives are chosen to effective against gram-positive and gram-negative bacteria and most preferably provide protection against E. Coli and S. Aureus (column 38, lines 15 – 30). Sherry teaches that residual disinfectancy can be achieved or enhanced using pH, preferably using compositions having a pH greater than 10.5 (column 38, lines 30 – 45). Sherry teaches using the wipe in locations such as stove tops and countertops (column 37); the Examiner equates this to use in Applicant's "food service applications".

As to claim 28, Sherry teaches the use of 0.001 – 0.1% of BARDAC 2280 (column 37, lines 25 – 35).

As to claim 30, Sherry teaches in formulation C that the primary non-ionic surfactant can be present in the amount of 0.005 – 10% and most preferably 0.025 – 4% (column 24, lines 55 – 69).

Art Unit: 1771

As to claim 31, Sherry teaches that formulation C can comprise an effective amount of an organic cleaning solvent such as mono-propylene glycol mono-propyl ether, di-propylene glycol mono-butyl ether, ethylene glycol mono-butyl ether, etc. (column 25, lines 1 – 25); the Examiner equates this to Applicant's "non-aqueous solvent". Sherry teaches that the organic cleaning solvent can be present in the amount of 0.5 – 10% and most preferably between 0.5 – 5% by weight of the composition (column 25, lines 1 – 25).

As to claims 29 and 36, Sherry teaches that the wiper can comprise a preservative (column 35, lines 10 – 20), a non-aqueous solvent (column 25, lines 1 – 25) and an effective amount of adjuvant (column 25, lines 45 – 55) such as a detergent builder like citric and tartaric acids (column 19, lines 60 – 69 and column 20, lines 1 – 10). It should be noted that on page 16 of the Specification it is indicated that citric acid can be considered a sequestrant. The detergent builder or sequestrant can be present in the amount of 0.01 – 0.3% (column 20, lines 1 – 10).

As to claims 53 – 54, Sherry teaches that the non-woven substrate can comprise various types of fibers including various cellulosic fibers such as wood, wood pulp, cotton, jute, hemp, etc (column 26, lines 1 – 25).

As to claims 56 and 69, Sherry teaches that the wipe may comprise low levels of effective anti-microbial ingredients such as BARDAC 2280 (column 37, lines 20 – 30), which according to Applicant's Specification meets the formula of the claim.

As to claims 57 and 70, Sherry teaches that the composition comprises preferably 0.5 – 5% by weight of non-aqueous solvent (column 25, lines 1 – 25).

As to claims 58 and 71, Sherry teaches that the composition comprises preservatives in the amount of 0.0001 – 0.01% by weight (column 21, lines 1 – 30).

Art Unit: 1771

As to claims 60 and 73, Sherry teaches that the composition has a pH of greater than 10.5 (column 38, lines 30 – 45).

As to claims 27, 34 - 35, 38 and 50 – 51, Sherry discloses the claimed invention except for that benzalkonium halide is present in an amount less than 2000 parts per million of the *released* solution as stated in claims 27 and 35, benzalkonium halide is present in the amount of about 150 to about 400 parts per million of *released* solution as stated in claims 34 and 38, benzalkonium halide is present in an amount of less than about 400 parts per million of the *released* solution as stated in claims 50 – 51. However, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amount of benzalkonium halide present in the released solution to an amount less than 2000 parts per million of the *released* solution as stated in claims 27 and 35, benzalkonium halide in the amount of about 150 to about 400 parts per million of *released* solution as stated in claims 34 and 38 and benzalkonium halide in an amount of less than about 400 parts per million of the *released* solution as stated in claims 50 – 51, since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the concentration of benzalkonium halide in the released solution in order to create a wipe with optimal biocidal effectiveness.

As to claims 27, 32 – 33, 35, 37, 59 - 68 and 72 – 81, although Sherry does not explicitly teach the claimed log reduction for E. Coli, S. Aureus or both is at least about 3 and the Kill Efficiency Ratio for E. Coli, S. Aureus, or both is at least about 40 as required by claim 27, the log reduction for E. Coli is at least about 4 as required by claim 32, the log reduction for S. Aureus is at least about 4 as required by claim 33, the wiper has a Kill Efficiency Ratio for E. Coli, S. Aureus, or both of a least 200 as required by claim 27, the pH of the sanitizing formulation is greater than about 8 as required by claims 59 and 72, the pH of the sanitizing formulation is between about 9 and about 12 as required by claims 60 and 73, the log reduction for E. Coli is at least about 3 as required by claims 61 and 74, the log reduction for E. Coli is at least about 4 as required by claim 75, the log reduction for E. Coli is at least about 5 as required by claims 62 and 76, the log reduction for S. Aureus is at least about 3 as required by claims 63 and 77, the log reduction for S. Aureus is at least about 4 as required by claim 78, the log reduction for S. Aureus is at least about 5 as required by claims 64 and 79, the Kill Efficiency Ratio for E. Coli, S. Aureus or both is a least about 100 as required by claims 35, 65 and 80, the Kill Efficiency Ratio for E. Coli, S. Aureus or both is least about 200 as required by claim 37 and 66, the Kill Efficiency Ratio for E. Coli, S. Aureus or both is at least about 400 as required by claims 67 and 81 and the wiper exhibits an Antimicrobial Reduction of less than about 95% as required by claim 68, it is reasonable to presume that the properties are inherent to Sherry. Support for said presumption is found in the use of like materials (i.e. a nonwoven substrate comprising a composition comprising at least one non-ionic surfactant and Applicant's specific benzalkonium halide in Applicant's claimed ranges with desired wipe saturation level) which would result in the claimed properties. The burden is upon the Applicant to prove otherwise. *In*

Art Unit: 1771

*re Fitzgerald* 205 USPQ 594. In addition, the presently claimed properties above would obviously have been present once the Sherry product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).


***Response to Arguments***


4. Applicant's arguments with respect to claims 27-38, 50-51, 53-54, 56-58, 60-71 and 73 - 81 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jennifer Boyd  
May 8, 2006

  
TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700